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(54) The CD40CR receptor and ligands therefor.

(57) The present invention relates to a counter-receptor, termed CD40CR, for the CD40 B-cell antigen, and to soluble ligands for this receptor, including fusion molecules comprising at least a portion of CD40 protein. It is based, at least in part, on the discovery that a soluble CD40/immunoglobulin fusion protein was able to inhibit helper T-cell mediated B-cell activation by binding to a novel 39 kD protein receptor on helper T-cell membranes. The present invention provides for a substantially purified CD40CR receptor; for soluble ligands of CD40CR, including antibodies as well as fusion molecules comprising at least a portion of CD40 protein; and for methods of controlling B-cell activation which may be especially useful in the treatment of allergy or autoimmune disease.

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EUROPEAN SEARCH REPORT

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EP 93 10 2279

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cls)
A	TISSUE ANTIGENS vol. 36, no. 1, July 1990, COPENHAGEN, DENMARK pages 33 - 36 E. CLARK 'CD40, a cytokine receptor in search for a ligand.' * the whole document *	1-4	C07K15/00 C12P21/08 A61K37/02 A61K39/395
P,X	IMMUNOLOGY TODAY vol. 13, no. 11, November 1992, AMSTERDAM, THE NETHERLANDS pages 431 - 433 R. NOELLE ET AL. 'CD40 and its ligand, an essential ligand-receptor pair for thymus-dependent B-cell activation.' * the whole document *	1-23	
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P,X	EUROPEAN JOURNAL OF IMMUNOLOGY vol. 22, no. 10, October 1992, WEINHEIM, GERMANY pages 2573 - 2578 P. LANE ET AL. 'Activated human T cells express a ligand for the human B cell-associated antigen CD40 which participates in T cell-dependent activation of B lymphocytes.' * the whole document *	1-3, 5-10, 14-17	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 March 1994	Examiner Nooij, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document			

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Application Number
EP 93 10 2279

DOCUMENTS CONSIDERED TO BE RELEVANT			
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THE HAGUE	21 March 1994	Nooij, F	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		A : member of the same patent family, corresponding document	